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APPLICATION NO	). F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,717		12/21/2001	Jiang Yang	J6727(C)	3860
201	7590	09/12/2003		1	
UNILEVER PATENT DEPARTMENT 45 RIVER ROAD EDGEWATER, NJ 07020			·	EXAMI	NER , *
				ELHILO,	EISA B
				ART UNIT	PAPER NUMBER
		•		1751 DATE MAILED: 09/12/2003	7

Please find below and/or attached an Office communication concerning this application or proceeding.

<del></del>	· · · · ·	Application No.	Applicant(s)				
		10/029,717	JIANG YANG ET AL.				
	Offic Action Summary	Examiner	Art Unit				
ž,		Eisa B Elhilo	1751				
	The MAILING DATE of this communication app						
Period fo	• •						
THE I  - Exter after - If the - If NO - Failu - Any r earne	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period verous to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be till y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed  ys will be considered timely.  n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status 1)⊠	Responsive to communication(s) filed on 21 L	December 2001					
لطارا [		is action is non-final.					
3)	,—		rosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
·	on of Claims						
•	Claim(s) <u>1-17</u> is/are pending in the application						
	4a) Of the above claim(s) is/are withdray	wn from consideration.	***				
·	5) Claim(s) is/are allowed.						
	Claim(s) <u>1-17</u> is/are rejected.						
	Claim(s) is/are objected to.  Claim(s) are subject to restriction and/o	r election requirement					
•	on Papers	r election requirement.					
	The specification is objected to by the Examine	r.					
·	The drawing(s) filed on is/are: a)☐ accep		ıminer.				
·	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	See 37 CFR 1.85(a).				
11) 🗋 -	The proposed drawing correction filed on	_is: a) ☐ approved b) ☐ disappr	oved by the Examiner.				
	If approved, corrected drawings are required in rep	oly to this Office action.					
12)	The oath or declaration is objected to by the Ex	aminer.					
Priority u	inder 35 U.S.C. §§ 119 and 120	· ·					
- 13) <u></u>	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(	a)-(d)_or_(f)				
a)[	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority document	s have been received.					
	2. Certified copies of the priority document	s have been received in Applicat	ion No				
* S	3. Copies of the certified copies of the prior application from the International Busee the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).					
14)[] A	cknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(	(e) (to a provisional application).				
	) $\square$ The translation of the foreign language proaction $\square$						
Attachment	t(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u>	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

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Claims 1-17 are pending in this application.

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-6, 8-9 and 12-17 rejected under 35 U.S.C. 102(b) as being anticipated by Shibata et al. (US 5,958,084).

Shibata (US' 084) teaches a hair dyeing composition comprising from 1 to 8% of nonnitrogenous chelating agent of citric acid (hydroxycarboxylate) as claimed in claims 1,2 and 5
(see col. 9, line 13) with a combination of triethanolamine salts of phosphoric acid as an amino
containing chelating agent as claimed in claim 9 (see col. 9, lines 10-12), wherein the chelating
agents (non-nitrogenous or amino containing) presented in a percentage amount of 1 to 8% based
on the whole composition, which falls within the claimed range as claimed in claims 8 and 9 (see
col. 9, line 24), poly(meth)acrylates and polyphosphates as claimed in claims 3 and 6 (see col. 9,
lines 19-20), an oxidation dye primary intermediate of aniline derivatives (pphenylenediamines) and an oxidation couplers of phenols as claimed in claim 1, 15 and 16 (see
col. 6, lines 28-34). The composition further, comprises propylene glycol as a solvent as claimed
in claim 12 (see col. 9, line 34), cationic surfactant as a conditioner as claimed in claim 13 (see
col. 10, lines 17-18), glycerin as a humectant as claimed in claim 14. Shibata further, teaches the
same method for coloring hair by contacting the hair with the above dyeing composition as

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claimed in claim 17 (see col. 14, claim 9). Shibata teaches all the limitations of the instant claims. Hence, Shibata anticipates the claims.

Claims 1-2, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Lim et al. et al. (US 6,045,590).

Lim (US' 590) teaches a hair dyeing composition comprising a non-nitrogenous chelating agents of zeolites and citric acid salt (hydroxycarboxylate) as claimed in claims 1-2, 5 and 7 (see col. 10, lines 30-37), an oxidative dye primary intermediate of p-phenylenediamine and an oxidative dye coupler of m-phenylenediamine as claimed in claim 1 (see col. 8, lines 6-25).

Claims 1, 2, 5-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dias et al. (US 6,004,355).

Dias (US' 355) teaches a hair dyeing composition comprising a non-nitrogenous chelating agents of citric acid as (hydroxycarboxylate) as claimed in claims 1, 2 and 5 (see col. 22, line 10), from 0.01% to 3% of non-nitrogenous chelating agents of polyacrylates, zeolites and citrate (hydroxycarboxylate) as claimed in claims 5-8 and 11(see col. 30, line 55 and col. 31, lines, 7, 25 and 29), primary oxidation dye intermediate of 4-aminophenol and coupler of resorcinol (meta-hydroxyphenol) as claimed in claims 1, 15 and 16 (see col. 18, lines 1-32). The composition further comprises amino containing chelating agent of nitrilotrimethylene phosphonates in the amount of 0.01% to 10% wherein the amount falls within the claimed range as claimed in claim 9 (see col. 24, lines 7-18), about 3% of non-nitrogenous chelating agents of polyacrylates, zeolites and citrate (hydroxycarboxylate) having amounts that fall on the upper limit of the claimed range as claimed in claims 10 and 0.01 to 3% of non-nitrogenous chelating agents having the amounts that fall within the claimed range as claimed in claim 11 (see col. 30,

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line 55 and col. 31, lines 7, 25 and 39), each oxidative hair coloring agent (primary intermediate and coupler) presents in the amount of 0.01% to about 2.0% wherein the amount falls within the claimed range and water as claimed in claims 10 and 11 (see col. 10, lines 41-44 and col. 31, lines 29-34), propylene glycol as a solvent as claimed in claim 12 (see col. 25, line 20), cationic surfactants as a conditioner as claimed in claim 13 (see col. 26, line 35), glycerin as a humectant as claimed in claim 14 (see col. 25, line 16). Dias further, teaches a method for coloring hair comprising applying to the hair the oxidative hair coloring composition as defined above and wherein the method is the same method as claimed in claim 17 (see col. 36, claim 25). Dias teaches all the limitations of the instant claims. Hence, Dias anticipates the claims.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 6,045,590) in view of Rollat et al. (US 2002/0147268 A1).

The disclosure of Lim (US' 590) is summarized above. Lim fails to teach a hair dyeing composition that comprises a chelating agent of phosphonate.

However, the reference teaches a composition comprising chelating agents of hydroxycarboxylates, phosphates, pyrophosphates and zeolites (see col. 10, lines 26-37).

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Rollat (US' 268 A1) in analogous art of hair dyeing compositions teaches a composition comprising anionic stabilizer containing phosphonate or phosphate components (see page 4, paragraph, 0056).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference by substituting the phosphate component with the phosphonate component as taught by Rollat with a reasonable expectation of success. Such modification would be obvious because the secondary reference of Rollat clearly teaches the equivalence between phosphates and phosphonates (see page 4, paragraph, 0056), and, thus, a person of the ordinary skill in the art would be motivated to replace the phosphates of the primary reference with the phosphonates of the secondary reference and would expect such a composition to have similar properties to those claimed, absent, unexpected results.

5 Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 5,958,084).

The disclosure of Shibata (US' 084) is summarized above. The claims differ from the reference by optimizing the amounts of the dying ingredients as claimed in claims 10 and 11.

However, the reference teaches a dyeing composition comprising 0.1 to 10% of oxidation dye precursors which are overlapped with the claimed ranges as claimed in claim 10 and 11 (see col. 6, lines 35-37), 0.1 to 5% of oxidative couplers which are within the claimed range as claimed in claim 10 and are overlapped with the claimed range as claimed in claim 11 (see col. 6, lines 39-40), 1 to 8% of non-amino chelating agents which are overlapped with the claimed

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ranges as claimed in claims 10 and 11 (see col. 9, lines 21-24) and water (see col. 11 and 12, Table 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make such a composition by employing any percentage ranges of these dyeing ingredients since these ranges are overlapping with the ranges taught by the reference, because an ordinary person would have the reasonable expectation that any range of percentages within the limits would give compositions with similar properties to those compositions which are exemplified, absent unexpected results.

#### Conclusion

The remaining references listed on form 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (703) 305-0217. The examiner can normally be reached on M - F (7:30-5:00) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-0661. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Eisa Elhilo Patent Examiner

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September 8, 2003